

Ser. No. 10/830,019
Attorney Docket: 042264-0101

In the Claims:

1. (Currently Amended) A method of designing a semiconductor circuit device, comprising the steps of:

generating first circuit data comprising information on a first circuit driven by a voltage from a first power system;

5 generating second circuit data comprising information on a second circuit driven by a voltage from a second power system different from the first power system;

obtaining cell data prestored in a storage medium and comprising information on a boundary circuit; and

generating boundary circuit connection information indicating that the boundary
10 circuit is connected on a transmission path between the first circuit and the second circuit wherein the boundary circuit comprises a suppressing circuit for suppressing shoot-through current of a boundary between the first circuit and the second circuit, said suppressing circuit including a logic circuit receiving an enable signal in a first state from one of said first circuit and second circuit which is ON for suppressing said shoot-through current of the boundary
15 between said first circuit and second circuit when the other of said first circuit and second circuit is OFF, and receiving an enable signal in a second state for enabling signal transfer between said first and second circuits when each of said first and second circuits are ON.

2. (Canceled)

3. (Previously Presented) A method of designing a semiconductor circuit device, comprising the steps of:

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generating first circuit data comprising information on a first circuit driven by a
5 voltage from a first power system;
generating second circuit data comprising information on a second circuit driven by a
voltage from a second power system different from the first power system;
obtaining cell data prestored in a storage medium and comprising information on a
boundary circuit; and
10 generating boundary circuit connection information indicating that the boundary
circuit is connected on a transmission path between the first circuit and the second circuit
wherein the boundary circuit comprises a circuit for preventing circuit malfunction
due to an indeterminate signal between the first circuit and the second circuit when a power
supply of the first circuit is OFF, and a power supply of the second circuit is ON.

4. (Currently Amended) A method of designing a semiconductor circuit device,
comprising the steps of:

generating first circuit data comprising information on a first circuit driven by a
6 voltage from a first power system;
generating second circuit data comprising information on a second circuit driven by a
voltage from a second power system different from the first power system;
obtaining cell data prestored in a storage medium and comprising information on a
boundary circuit; and
10 generating boundary circuit connection information indicating that the boundary
circuit is connected on a transmission path between the first circuit and the second circuit
wherein the boundary circuit comprises a suppressing circuit for suppressing leakage
current of a boundary between the first circuit and the second circuit, said suppressing circuit

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including a logic circuit receiving an enable signal in a first state from one of said first circuit
15 and second circuit which is ON for suppressing said leakage current of the boundary between
said first circuit and second circuit when the other of said first circuit and second circuit is
OFF, and receiving an enable signal in a second state for enabling signal transfer between
said first and second circuits when each of said first and second circuits are ON.

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5. (Previously Presented) The method of designing a semiconductor circuit device
according to Claim 1, wherein the boundary circuit further comprises a circuit for level
conversion between the first circuit and the second circuit.

6. (Previously Presented) The method of designing a semiconductor circuit device
according to Claim 1, wherein the boundary circuit further comprises a protection circuit for
protecting a transistor in the first circuit and/or the second circuit from electrostatic discharge.

7. (Previously Presented) The method of designing a semiconductor circuit device
according to Claim 1, wherein the first circuit data, the second circuit data, and the cell data
are data for logic circuit design.

8. (Previously Presented) The method of designing a semiconductor circuit device
according to Claim 1, wherein the first circuit data, the second circuit data, and the cell data
are data for layout design.

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9. (Previously Presented) The A semiconductor circuit device designed by a method
of designing a semiconductor circuit device according to Claim 1.

10.-13.(Canceled)